

Author Index

- Adley, F. E.: Methods for Performance Testing of Respiratory Protective Equipment. July-August, p. 251
- Altshuler, Aubrey P.: Concentration of Hydrocarbons on Silica Gel Prior to Gas Chromatographic Analysis. March-April, p. 164
- Determination of Olefins in Combustion Gases and in the Atmosphere. July-August, p. 289
- Anderson, Floyd G.: A Technique for Counting and Sizing Dust Samples with a Microprojector. July-August, p. 330
- Andresen, William V.: Industrial Hygiene Design in Raw Materials Handling Systems. November-December, p. 509
- Babiyak, Mary Ann: Experimental Silicosis: A Quantitative Study of Dust Mobilization. September-October, p. 379
- Bahor, Raymond E.: Toxicity and Metabolism of Ortho-, Meta-, and Para-Terphenyls. September-October, p. 372
- Baier, Edward J.: Occupational Health Program—A Self-Inspection Project. July-August, p. 337
- Ball, W. L.: An Evaluation of Micro-Vacuum Sublimation Separation of Atmospheric Polycyclics. May-June, p. 222
- Ballard, Thomas A.: Inhalation Studies With Chloroacetophenone, Diphenylaminochloroarsine, and Pelargonic Morpholide—I. Animal Exposures. May-June, p. 194
- Barlow, Oran M.: Direct-Reading Beryllium Spectrograph. May-June, p. 203
- Beard, E. L.: Portable DOP Tester for Inspection of High-Efficiency Filters. November-December, p. 473
- Bellar, Thomas A.: Concentration of Hydrocarbons on Silica Gel Prior to Gas Chromatographic Analysis. March-April, p. 164
- Bolton, N. E.: Determination of Manganese in Biological Specimens. July-August, p. 319
- Bonney, Thomas B.: New Developments Concerning the Industrial Noise Problem. July-August, p. 282
- Brewer, Lial W.: Separation and Analysis of Dust in Lung Tissue. January-February, p. 58
- X-Ray Diffraction Analysis of Industrial Dust. May-June, p. 214
- Brugsch, Heinrich G.: Massachusetts Experience with Toluene Di-isocyanate. July-August, p. 265
- Burns, Craig: Health Hazards and Heavy Construction. July-August, p. 273
- Carpenter, Charles P.: Range-Finding Toxicity Data: List VI. March-April, p. 95
- Carson, Theophilus R.: The Responses of Animals Inhaling Nitrogen Dioxide for Single, Short-term Exposures. November-December, p. 457
- Cavender, J. D.: Determination of Manganese in Biological Specimens. July-August, p. 319
- Cember, Herman: The Influence of the Size of the Dose on the Distribution and Elimination of Inorganic Mercury, $Hg(NO_3)_2$, in the Rat. July-August, p. 304
- Cholak, J.: Modern Concept of Analytical Chemistry in Industrial Hygiene and Problems for the Future. January-February, p. 26
- Clemons, Clarence A.: Concentration of Hydrocarbons on Silica Gel Prior to Gas Chromatographic Analysis. March-April, p. 164
- Comstock, Eric G.: A System for Exposure of Mice to an Atmosphere Containing Carbon Particles. January-February, p. 88
- Copeland, R. A.: Health Hazards of Spraying Polyurethane Foam Out-of-Doors. September-October, p. 345
- Cornish, Herbert H.: A Modified Spectrophotometric Method for the Determination of Hydrazine. March-April, p. 151
- Toxicity and Metabolism of Ortho-, Meta-, and Para-Terphenyls. September-October, p. 372
- Dambrauskas, Thomas: A Modified Spectrophotometric Method for the Determination of Hydrazine. March-April, p. 151
- Dennis, Richard: Notes on the Design and Leak-Testing of Sampling Filter Holders. November-December, p. 480
- Dubois, L.: The Determination of Urinary Fluorides. March-April, p. 157
- Arsenic Digestion Losses in the Preparation of Biological Samples. July-August, p. 327
- Duncan, Burris: Toluene Diisocyanate Inhalation Toxicity: Pathology and Mortality. November-December, p. 447
- Elbert, Walter C.: Polynuclear Aromatic Hydrocarbon Composition of the Atmosphere in Some Large American Cities. March-April, p. 137
- Polynuclear Aromatic Hydrocarbon Composition of Air Polluted by Coal-Tar Pitch Fumes. November-December, p. 482
- Elkins, Hervey B.: Maximum Allowable Concentrations of Mixtures. March-April, p. 132
- Massachusetts Experience with Toluene Di-isocyanate. July-August, p. 265
- Erley, D. S.: Observations on the Concentrations of Trichloroethylene in Blood and Expired Air Following Exposure of Humans. March-April, p. 167
- Infrared Analysis of Air Contaminants Trapped on Silica Gel. September-October, p. 388
- Fahy, John P.: Massachusetts Experience with Toluene Di-isocyanate. July-August, p. 265
- Fairchild, Edward J.: Toluene Diisocyanate Inhalation Toxicity: Pathology and Mortality. November-December, p. 447
- Farrah, G. H.: Diffusion Method for Determination of Urinary Fluoride. July-August, p. 314
- First, Melvin W.: Portable Laboratory Scrubber Unit for Perchloric Acid. November-December, p. 463
- Foster, Kirk E.: Evaluation of Air Particulate Sampling Equipment. September-October, p. 404
- Fox, Frank T.: Polynuclear Aromatic Hydrocarbon Composition of the Atmosphere in Some Large American Cities. March-April, p. 137
- Polynuclear Aromatic Hydrocarbon Composition of Air Polluted by Coal-Tar Pitch Fumes. November-December, p. 482
- Frank, Adrian: A Modification of the McCord and Zemp Method for the Determination of Lead in Urine. September-October, p. 424
- Gast, J. H.: A System for Exposure of Mice to an Atmosphere Containing Carbon Particles. January-February, p. 88
- Gay, H. H.: Observations on the Concentrations of Trichloroethylene in Blood and Expired Air Following Exposure of Humans. March-April, p. 167
- Glauberger, Harold: The Directional Dependence of Air Samplers. May-June, p. 235
- Gongwer, Louis E.: Inhalation Studies with Chloroacetophenone, Diphenylaminochloroarsine, and Pelargonic Morpholide—II. Human Exposures. May-June, p. 199

- Goppers, Velta: Macromolecular Compounds Isolated from Airborne Particles by Electrophoresis and Paper Chromatography. May-June, p. 181
- Graham, Stuart: Toluene Diisocyanate Inhalation Toxicity: Pathology and Mortality. November-December, p. 447
- Gross, Paul: Experimental Silicosis: A Quantitative Study of Dust Mobilization. September-October, p. 379
- Gussman, Robert A.: Notes on the Design and Leak-Testing of Sampling Filter Holders. November-December, p. 480
- Gutentag, Philip J.: Inhalation Studies with Chloroacetophenone, Diphenylaminochloroarsine, and Pelargonic Morpholide—II. Human Exposures. May-June, p. 199
- Guth, Sylvester K.: Lighting Research. September-October, p. 359
- Hake, C. L.: Observations on the Concentrations of Trichloroethylene in Blood and Expired Air Following Exposure of Humans. March-April, p. 167
- Hatch, Theodore: Changing Objectives in Occupational Health. January-February, p. 1
- Hathaway, James A.: Metabolic Effects of Chronic Ozone Exposure on Rats. September-October, p. 392
- Hauser, Thomas R.: Polynuclear Aromatic Hydrocarbon Composition of the Atmosphere in Some Large American Cities. March-April, p. 137
- Polynuclear Aromatic Hydrocarbon Composition of Air Polluted by Coal-Tar Pitch Fumes. November-December, p. 482
- Heaney, Robert J.: Comparative Equipment for Atmospheric Sampling of Sulfur, Fluorine, and Dustfall. July-August, p. 296
- Held, Bruce J.: Planning Ventilation for Nuclear Reactor Facilities. January-February, p. 83
- Hill, William H.: Chromyl Chloride—A Possibly Important Industrial Air Contaminant. May-June, p. 186
- Howard, O. H.: An Improved Continuous Internal-Electrolysis Analyzer for Gaseous Fluorides in Industrial Environments. January-February, p. 48
- Hoyle, H. R.: Health Hazards of Spraying Polyurethane Foam Out-of-Doors. September-October, p. 345
- Jacobs, Morris B.: The Determination of Thallium in Urine. September-October, p. 411
- Katz, Morris: An Evaluation of Micro-Vacuum Sublimation Separation of Atmospheric Polycyclics. May-June, p. 222
- Analysis of Polycyclic Hydrocarbons in Particulate Hydrocarbons. November-December, p. 487
- Kehoe, Robert A.: Cummings Memorial Lecture—Education and Training in Industrial Hygiene. May-June, p. 175
- Kerr, Gerald W.: Use of Statistical Methodology in Environmental Monitoring. January-February, p. 75
- Ketcham, N. H.: Practical Experience with Routine Use of Field Indicators. March-April, p. 127
- Knauber, John W.: Occupational Health Program—A Self-Inspection Project. July-August, p. 337
- Killens, Richard: Toluene Diisocyanate Inhalation Toxicity: Pathology and Mortality. November-December, p. 447
- Knudsen, John F.: A Review of Certain Design Standards for Dust Exhaust Systems. November-December, p. 503
- Lage, Lois J.: Determination of Olefins in Combustion Gases and in the Atmosphere. July-August, p. 289
- Lindeken, C. L.: Portable DOP Tester for Inspection of High-Efficiency Filters. November-December, p. 473
- McCarl, George W.: Massachusetts Experience with Toluene Di-isocyanate. July-August, p. 265
- McNerney, James M.: Experimental Silicosis: A Quantitative Study of Dust Mobilization. September-October, p. 379
- Meachim, George: The Interpretation of Erythrocyte Spleting in Lead Workers. May-June, p. 245
- Meeker, James E.: Polynuclear Aromatic Hydrocarbon Composition of the Atmosphere in Some Large American Cities. March-April, p. 137
- Polynuclear Aromatic Hydrocarbon Composition of Air Polluted by Coal-Tar Pitch Fumes. November-December, p. 482
- Mitchell, Howard W.: Health Hazards and Heavy Construction. July-August, p. 273
- Monkman, J. L.: The Determination of Urinary Fluorides. March-April, p. 157
- An Evaluation of Micro-Vacuum Sublimation Separation of Atmospheric Polycyclics. May-June, p. 222
- Arsenic Digestion Losses in the Preparation of Biological Samples. July-August, p. 327
- The Determination of Iron in Dustfall Samples. September-October, p. 415
- Analysis of Polycyclic Hydrocarbons in Particulate Hydrocarbons. November-December, p. 487
- Moore, G. E.: An Evaluation of Micro-Vacuum Sublimation Separation of Atmospheric Polycyclics. May-June, p. 222
- Analysis of Polycyclic Hydrocarbons in Particulate Hydrocarbons. November-December, p. 487
- Murrow, J. L.: Portable DOP Tester for Inspection of High-Efficiency Filters. November-December, p. 473
- Nelson, Norton: Skin Irritation and Skin Tumor Production by Beta Propiolactone (BPL). July-August, p. 257
- Orris, Leo: Skin Irritation and Skin Tumor Production by Beta Propiolactone (BPL). July-August, p. 257
- Ottoboni, Fred: Health Hazards and Heavy Construction. July-August, p. 273
- Owens, Edmund J.: Inhalation Studies with Chloroacetophenone, Diphenylaminochloroarsine, and Pelargonic Morpholide—II. Human Exposures. May-June, p. 199
- Palmes, E. D.: Skin Irritation and Skin Tumor Production by Beta Propiolactone (BPL). July-August, p. 257
- Pate, John B.: Analytical Aspects of the Use of Glass Fiber Filters for the Collection and Analysis of Atmospheric Particulate Matter. March-April, p. 145
- Paulus, Harold J.: Macromolecular Compounds Isolated From Airborne Particles by Electrophoresis and Paper Chromatography. May-June, p. 181
- Petrock, K. F.: Portable DOP Tester for Inspection of High-Efficiency Filters. November-December, p. 473
- Peterson, J. E.: Observations on the Concentrations of Trichloroethylene in Blood and Expired Air Following Exposure of Humans. March-April, p. 167
- Health Hazards of Spraying Polyurethane Foam Out-of-Doors. September-October, p. 345
- Phair, John J.: New Developments in Chronic Disease Epidemiology: Competing Risks and Eligibility. November-December, p. 433
- Postman, Benjamin F.: Dust Control in the Asbestos Textile Industry. January-February, p. 67
- Pozzani, Urbano C.: Range-Finding Toxicity Data: List VI. March-April, p. 95
- Punte, Charles L.: Inhalation Studies With Chloroacetophenone, Diphenylaminochloroarsine, and Pelargonic Morpholide—I. Animal Exposures. May-June, p. 194
- Inhalation Studies with Chloroacetophenone, Diphenylaminochloroarsine, and Pelargonic Morpholide—II. Human Exposures. May-June, p. 199
- Quino, E. A.: Determination of Dibutyl Mercury Vapors in Air. May-June, p. 231
- Ray, W. H.: Stack Gas Beta Monitor. November-December, p. 496
- Reynolds, R. G.: The Determination of Iron in Dustfall Samples. September-October, p. 415
- Rizzo, John J.: A Short Cut to Fuel Element Criticality Analysis. March-April, p. 171
- Robson, Charles D.: Evaluation of Air Particulate Sampling Equipment. September-October, p. 404.

- Rosenholtz, Mitchell S.: The Responses of Animals Inhaling Nitrogen Dioxide for Single, Short-term Exposures. November-December, p. 457
- Rowley, R. J.: Diffusion Method for Determination of Urinary Fluoride. July-August, p. 314
- Rue, Roger R.: A System for Exposure of Mice to an Atmosphere Containing Carbon Particles. January-February, p. 88
- Rumble, Robert P.: Direct-Reading Beryllium Spectrograph. May-June, p. 203
- Rushing, D. E.: A Tentative Method for the Determination of Elemental Phosphorus in Air. September-October, p. 383
- Rustagi, Jagdish: New Developments in Chronic Disease Epidemiology: Competing Risks and Eligibility. November-December, p. 433
- Ryan, Richard C.: Toxicity and Metabolism of Ortho-, Meta-, and Para-Terphenyls. September-October, p. 372
- Saltzman, Bernard E.: Basic Theory of Gas Indicator Tube Calibration. March-April, p. 112
- Santomassino, Vincent C.: Direct-Reading Beryllium Spectrograph. May-June, p. 203.
- Sawicki, Eugene: Polynuclear Aromatic Hydrocarbon Composition of the Atmosphere in Some Large American Cities. March-April, p. 137
- Polynuclear Aromatic Hydrocarbon Composition of Air Polluted by Coal-Tar Pitch Fumes. November-December, p. 482
- Scheel, Lester D.: Toluene Diisocyanate Inhalation Toxicity: Pathology and Mortality. November-December, p. 447
- Schulte, H. F.: Modern Concepts of Air Sampling and Problems for the Future. January-February, p. 20
- Sexton, Robert W.: High Velocity Acid Mists Collection. September-October, p. 396
- Seymour, G. G.: Some Experience with Radioiodine in the Reactor Buildings at Chalk River. May-June, p. 240
- Sheinbaum, Milton: Some Health Hazards Associated with the Building Trades. September-October, p. 333
- Silverman, Leslie: (Moderator) Panel Discussion of Field Indicators in Industrial Hygiene. March-April, p. 108
- Notes on the Design and Leak-Testing of Sampling Filter Holders. November-December, p. 480
- Portable Laboratory Scrubber Unit for Perchloric Acid. November-December, p. 463
- Sleva, Stanley F.: Determination of Olefins in Combustion Gases and in the Atmosphere. July-August, p. 289
- Smyth, Henry F., Jr.: A Toxicologist's View of Threshold Limits. January-February, p. 37
- Range-Finding Toxicity Data: List VI. March-April, p. 95
- Stack, V. T., Jr.: Determination of Manganese in Biological Specimens. July-August, p. 319
- Starr, Courtland P.: Comparative Equipment for Atmospheric Sampling of Sulfur, Fluorine, and Dustfall. July-August, p. 296
- Sterling, Theodor D.: New Developments in Chronic Disease Epidemiology: Competing Risks and Eligibility. November-December, p. 433
- Stewart, R. D.: Observations on the Concentrations of Trichloroethylene in Blood and Expired Air Following Exposure of Humans. March-April, p. 167
- Stoddard, D. L.: In-Service Solvent Cleaning of Electric Motors. January-February, p. 62
- Stokinger, Herbert E.: New Concepts and Future Trends in Toxicology. January-February, p. 8
- Threshold Limits and Maximal Acceptable Concentrations: Their Definition and Interpretation, 1961. January-February, p. 45
- Striegel, Jean A.: Range-Finding Toxicity Data: List VI. March-April, p. 95
- Tabor, Elbert C.: Analytical Aspects of the Use of Glass Fiber Filters for the Collection and Analysis of Atmospheric Particulate Matter. March-April, p. 145
- Talvitie, N. A.: Separation and Analysis of Dust in Lung Tissue. January-February, p. 58
- X-ray Diffraction Analysis of Industrial Dust. May-June, p. 214
- Teichman, T.: The Determination of Urinary Fluorides. March-April, p. 157
- Terrill, Richard E.: Metabolic Effects of Chronic Ozone Exposure on Rats. September-October, p. 392
- Van Sandt, Walter A.: Direct-Reading Beryllium Spectrograph. May-June, p. 203
- Weber, C. W.: An Improved Continuous Internal-Electrolysis Analyzer for Gaseous Fluorides in Industrial Environments. January-February, p. 48
- Weeks, Maurice H.: The Responses of Animals Inhaling Nitrogen Dioxide for Single, Short-term Exposures. November-December, p. 457
- Weil, Carrol S.: Range-Finding Toxicity Data: List VI. March-April, p. 95
- Weimer, John T.: Inhalation Studies with Chloracetophenone, Diphenylaminochloroarsine, and Pelargonic Morpholide—I. Animal Exposures. May-June, p. 194
- Wells, W. R.: In-Service Solvent Cleaning of Electric Motors. January-February, p. 62
- Wilinski, Frank T.: The Responses of Animals Inhaling Nitrogen Dioxide for Single, Short-term Exposures. November-December, p. 457
- Wisehart, D. E.: Methods for Performance Testing of Respiratory Protective Equipment. July-August, p. 251
- Williams, Haven L.: Occupational Health Program—A Self-Inspection Project. July-August, p. 337
- Worden, Francis X.: Chromyl Chloride—A Possibly Important Industrial Air Contaminant. May-June, p. 186
- Zavon, Mitchell R.: Modern Concepts of Diagnosis and Treatment in Occupational Medicine. January-February, p. 30
- Zullo, Philip: Occupational Health Program—A Self-Inspection Project. July-August, p. 337

Subject Index

A

- absolute filters, in scrubber, 463
- acid gases, scrubber for, 463
- acid mists, collector, 396, 463
- adhesive paper, for dustfall, 296
- aerosol, generator for, 473
- air, in cities, 137
 - dibutyl mercury in, 231
 - fluoride in, 48
 - tolylene diisocyanate in, 228
 - trichloroethylene in, 167
- air flow, in exhaust systems, 503
- air pollution, biological, 181
 - coal-tar in, 482
 - detmn. of iron, 415
 - hydrocarbons in, 137
 - infrared analysis of, 388
 - olefins in, 289
 - sampling methods, 145, 296
 - silica gel sampler, 388
 - sublimation method, 222
- air sampling, concepts in, 20
 - problems in, 20
 - tubes for, 127
 - see also specific subjects and materials
- Alizarin, detmn. of fluoride, 314
- aluminum, electrode, 48
- analysis, by
 - infrared, 388
 - new techniques, 26
 - silica gel, 388
 - x-ray, 214
- analysis, for
 - air pollutants, 145, 388
 - arsenic, 327
 - beryllium, 203
 - chromyl chloride, 186
 - dibutyl mercury, 231
 - dust in lungs, 58
 - fluoride, 48, 157, 314
 - hydrazine, 151
 - iron, 415
 - lead, 424
 - manganese, 319
 - olefins, 289
 - phosphorus, 383
 - radioiodine, 240
 - thallium, 411
 - tolylene diisocyanate, 228
- analysis, of
 - air pollutants, 388
 - dusts, 214
 - polycyclic hydrocarbons, 487
 - urine for fluoride, 157, 314
 - urine for thallium, 411
- analytical chemistry, in industrial hygiene, 26
- anthanthrene, in city air, 137
- anthracene, determination of, 487
 - in coal tar fume, 482
- apparatus, acid mist collector, 396
 - cleaning for elect. motors, 62
 - electrolysis, 48
 - filter sampler, 480
 - fluoride detmn., 48
 - sampling particulates, 404
- application, of indicator tubes, 127
- aromatic compounds, in city air, 137
- arsenic, losses in detmn., 327
- asbestos, in textile industry, 67

- asbestos-rockwool cement, hazards of, 353
- automobile, exhaust fumes, 137, 289

B

- barium, Hygienic Guide, 517
- bathophenanthroline, detmn. of iron, 415
- benzaldehyde, detmn. of hydrazine, 151
- benzofluoranthene, in city air, 137
- benzopyrene, in city air, 137
 - detmn. of, 487
 - in tar fumes, 482
 - tumors from, 257
- beryl, as internal standard, 214
- beryllium, detmn. by spectrograph, 203
- beta propiolactone, skin effects, 257
- beta radiation, in stack gas, 496
- biochemical profiles, 11
- biologic samples, arsenic losses, 327
 - detmn. of manganese, 319
- blood, trichloroethylene in, 167
- BPL, effect on skin, 257
- breath, trichloroethylene in, 167
- brightness, in seeing, 359
- building trades, health hazards, 353
- burette, assembly, 156
- butyl acetate, Hygienic Guide, 516

C

- cadmium, Hygienic Guide, 518
- calculation, of criticality, 171
- calibration
 - of indicator tubes, 112
 - of sampler, 404
- cancer, by chromyl chloride, 186
 - from propiolactone, 257
- carbazole, in tar fume, 482
- carbon, exposure to, 88
- carbon tetrachloride, cleaning motors with, 62
- catalysis, detmn. of manganese, 319
- Chalk River, exposure experience, 240
- chloracetophenone, toxicity of, 194, 199
- chloroform, detmn. of, 388
- chlorothene, detmn. of, 388
- cholinesterase, 10
- chromatography, of contaminants, 181
 - sampling for, 164
- cleaning, electric motors, 62
 - with solvents, 62
- chromyl chloride, exposure to, 186
 - formation of, 186
- chrysene, in city air, 137
- clinical data, with toluene diisocyanate, 265
- coal-tar, in air pollution, 482
- collection,
 - (see also sampling)
- collector, for acid mists, 396
 - high velocity, 396
- colorimetric, detmn. of arsenic, 327
 - manganese, 319

combustion gases, olefins in, 289
conditioned reflexes, in setting limits, 37
constant head device, 52
construction, work hazards, 273
contamination,
—biological, 181
—by radioiodine, 240
control,
—of asbestos dust, 67
—material handling, 509
—polyurethane spraying, 345
—TDI exposure, 345
conveyors, ventilation of, 503
coronene, in city air, 137
counting, beta monitor, 496
—dust concentrations, 330
cristobalite, by x-ray, 214
criteria, for noise, 282
—portable gas scrubber, 463
—of ventilation design, 83
criticality, analysis, 171
cyclohexane, extraction with, 487
cystine, in fingernails, 8

D

dams, health hazards, 273
death, rates, 433
deposition, of quartz in lungs, 379
dermatitis, by poison oak, 131
design,
—of beta monitor, 496
—electrostatic precipitator, 496
—exhaust systems, 503
—filter sampler, 480
—perchloric acid scrubber, 463
determination,
—(see analysis)
—(see also specific topics)
diagnosis, in occupational medicine, 30
dibutyl mercury, detmn. of, 231
diethylaniline, detmn. of manganese, 319
diffraction, x-ray methods, 214
diffusion, detmn. of fluoride, 314
digestion, arsenic losses in, 327
—tissue for analysis, 58
diisobutyl ketone, Hygienic Guide, 514
diisocyanate, detmn. of, 228
—exposure to, 265, 345
dimethylaminobenzaldazine, detmn. of hydrazine, 151
p-dimethylaminobenzaldehyde, detmn. of olefins, 289
dimethylheptanone, Hygienic Guide, 514
dioctylphthalate, aerosol of, 473
—in filter testing, 473
diphenylphenanthroline, detma. of iron, 415
diphenylaminochloroarsine, toxicity of, 194, 199
directional, dependence of samples, 235
distribution, of mercuric nitrate, 304
dithiocarbamate, detmn. of arsenic, 327
dose, effect of, 304
—size of, 304
drilling, dust from, 273
droplet, eliminator, 463
dust, asbestos, 67
—in construction work, 273
—control of, 67
—counting, 330
—detmn. in lungs, 58
—detmn. of size, 330
—detmn. by x-ray, 214
—from dry drilling, 273
—from grinding concrete, 353
—in materials handling, 509
—mobilization in body, 379
—in pneumatic plastering, 353
—sampling study, 235
dustfall, detmng. iron in, 415
—sampling, 296

education,
—(see also training)
efficiency, of mist collector, 396
electric motors, solvent cleaning, 62
electrode, aluminum, 48
—for fluoride detmn., 48
electrolysis, detmn. of fluoride, 48
electrometric, detmn. of fluoride, 157
electrophoresis, of contaminants, 181
electrostatic, precipitator, 496
eligibility, in epidemiology, 433
emission, fluorescent, 487
environment, statistical monitoring, 75
enzymes, in toxicology, 10
epidemiology, methods, 30
—of chronic disease, 433
epoxy resins, in building trades, 353
equipment, sampling, 404
Eriochrome Cyanine R, detmn. of fluoride, 314
erythrocytes, stippling of, 245
excitation, for fluorescence, 487
excretion, of mercury, 304
exhaust, automobile, 137
—system design, 503
exhaust gases, composition, 137
exposure chamber, with carbon particles, 88
—for mice, 88
exposure, to
—nitrogen dioxide, 457
—mixtures, 132
—toluene diisocyanate, 265, 447
—trichloroethylene, 167
extraction, with cyclohexane, 487
—of hydrocarbons, 487

F

fiberglass, filters, 145
field indicators, 108
filters, design of holder, 480
—in detmng. beryllium, 203
—efficiency test, 473
—fiberglass, 145
—high efficiency, 473
—holder testing, 480
—in laboratory hood, 463
—membrane sampler, 330, 404
—sampling, 145, 404
—sampling study, 235
fingernails, cystine in, 8
flammable range, of trichloroethylene, 180
fluoranthene, in city air, 137
fluorescence, of hydrocarbons, 487
fluoride, air-sampling for, 296
—analyzer, 48
—detmn. by electrometry, 157
—detmn. in urine, 157, 314
—ion exchange separation, 157
foam, polyurethane, 345
Freon 12, in testing respirators, 251
fuel elements, criticality of, 171
fumes, coal-tar, 482

G

gases, beta monitoring, 496
genetics, 30
"Giraffe" sampler, 203
grease pans, for dustfall, 296
grinding, concrete, 353
Gutzeit, detmn. of arsenic, 327

H

- hazards, in building trades, 353
 - in construction work, 273
- hearing, impairment, 282
- highway, health hazards, 273
- Hi-Vol sampler, 404
- hood, adjustable, 62
 - for dust control, 67
 - for motor cleaning, 62
 - scrubber unit, 463
- hydrazine, detmn. of, 151
- hydrocarbons, analysis of, 487
 - in auto exhaust, 137
 - in cigarette smoke, 137
 - in city air, 137
 - in coal-tar, 482
 - concentration of, 164
 - polycyclic anal., 487
 - on silica gel, 164
 - sublimation of, 222
- hydrogen peroxide, tissue digestion with, 58
- Hygienic Guides, barium, 517
 - n-butyl acetate, 516
 - cadmium, 518
 - diisobutyl ketone, 514
 - dimethylheptanone, 514
 - isovalerone, 514

I

- illumination,
 - research in, 359
 - standards, 359
- indicators, for field use, 108
- indicator tubes, 108
 - calibration of, 112
 - use of, 127
- industrial hygiene, chemistry of, 26
 - training, 175
 - trends, 1, 8
- infrared, detmn. of air contaminants, 388
- inspection, program of, 337
- iodine, detmn. of arsenic, 327
 - radio, 240
- ion exchange, detmng. fluoride, 157
- iron, detmn. in dustfall, 415
- irritant, nitrogen dioxide, 457
 - of skin, 257
- irritation, data on, 95
 - by toluene diisocyanate, 447
- isocyanates, detmn. of, 228
 - toxicity of, 447
- isovalerone, Hygienic Guide, 514

K

- kidney, storage of mercury, 304

L

- laboratory, fume removal, 463
- LD₅₀ of nitrogen dioxide, 457
- lead, detmn. in urine, 424
- lead peroxide, detmn. of sulfur dioxide, 296
- lead poisoning, stippled cells in, 245
- leak-testing, of filter samplers, 480
- lighting, research in, 359
- Limits, Threshold for 1962, 419
- lungs, dust in, 58

M

- MAC, basis of, 37, 45
 - of mixtures, 132
 - of toluene diisocyanate, 265
 - see also TLV

- macromolecular compounds, 181
- manganese, detmn. in tissue, 319
- materials-handling, designs for, 509
 - ventilation, 503
- maximum acceptable concentrations, concepts of, 37, 45
- measurement, of visibility, 359
- mechanisms, of toxicity, 8
- mechanization, hazards from, 273, 353
- membrane filter, for particles in air, 330
 - sampler, 404
 - use in x-ray anal., 58
- mercuric nitrate, in body, 304
 - excretion of, 304
 - toxicity of, 304
- mercury, dibutyl, 231
 - storage in body, 304
 - tagged, 304
- metabolism, effects of ozone, 392
 - of terphenyls, 372
- methanol, detmn. of, 388
- methods, epidemiologic, 433
- midget impinger, for particles in air, 330
- microprojector, for dust counting, 330
 - for dust sizing, 330
- mixtures, safe concentrations, 132
- mobilization, of dust in body, 379
- monitoring, indicators for, 127
 - stack gases, 496
- mortality, patterns, 433
 - from toluene diisocyanate, 447
- motors, cleaning electric, 62

N

- National Air Sampling Network, 145
- nitrogen dioxide, toxicity of, 457
- neuraminic acid, 9
- noise, criteria of, 282
 - construction work, 273
 - research on, 282
 - review of problem, 282
- nuclear reactor, ventilation of, 83

O

- objectives, of industrial hygiene, 1
- occupational health,
 - (see industrial hygiene)
- occupational medicine, concepts of, 30
- olefins, in combustion gases, 289
 - detmn. of, 289
 - in exhaust gases, 289
- ozone, chronic exposure, 392
 - metabolic effects, 392

P

- particles, exposure system, 88
 - sampling equipment, 404
 - size detmn., 330
 - see also dust
- particulates, anal. of, 145
 - anal. by x-ray, 214
 - biological in air, 181
 - radiation monitor, 496
- pathology, from nitrogen dioxide, 457
 - from toluene diisocyanate, 447
- patterns, mortality, 433
- pelargonic morpholide, toxicity of, 194, 199
- perchloric acid, scrubber unit for, 465
- perylene, in city air, 137
- phenanthrene, in tar fume, 482
- phosphorus,
 - elemental in air, 383
- photometer, light scattering, 473
- pitch, coal-tar, 482

plant survey, construction industry, 273
 —for diisocyanate, 265
 —of spraying polyurethane, 345
 pollutants, olefins in air, 289
 —sampling on silica gel, 388
 pollution, of city air, 137
 polycyclics, separation of, 222
 polynuclear hydrocarbons, 137
 polyurethane, in building trades, 353
 —exposure to, 265
 —health hazards, 345
 —spraying of, 345
 pneumatic plastering, dust from, 353
 poison oak, dermatitis, 131
 precipitator, radiation monitor, 496
 profiles, biochemical, 11
 program, for occupational health, 337
 propiolactone (beta), skin effects, 257
 pyrene, in city air, 137

Q

quartz, in the body, 379
 —detmn. in dusts, 214
 —detmn. by x-ray, 214

R

radiation, monitor for gases, 496
 radioactivity, tagged mercury, 304
 radioiodine, detmn. of, 240
 —exposure experience, 240
 reactors, radioiodine in, 240
 —ventilation of, 83
 regulator, sampling flow, 404
 respirators, testing of, 251
 risk, in epidemiology, 433

S

samplers, leak-testing of, 480
 sampling, for beryllium, 203
 —calibration, 112
 —for dibutyl mercury, 231
 —directional dependence, 235
 —for dust in air, 330
 —for dustfall, 296
 —for elemental phosphorus, 383
 —with filters, 145
 —for fluoride, 296
 —with membrane filter, 404
 —for particulates, 145, 404
 —pollutants on silica gel, 388
 —selection of site, 75
 —statistical selection, 75
 —for sulfur dioxide, 296
 —for toluene diisocyanate, 228, 345
 —for tolylene diisocyanates, 228, 345
 screening, for toxicity, 95
 scrubber, for perchloric acid, 463
 self-inspection, program of, 337
 separation, by sublimation, 222
 —by ion exchange, 157
 settled dust, analysis of, 214
 sight, illumination for, 359
 silica gel, sampling air pollutants, 388
 —sampling hydrocarbons, 164
 silicosis, dust mobilization in, 379
 Sinclair-Phoenix photometer, 473
 silver diethyl dithiocarbamate, detmn. of arsenic, 327
 size, detmn. of dust, 330
 skin, effects of BPL, 257
 smoke, composition, 137
 solvents, for extractions, 487
 —for motor cleaning, 62

spectrograph, determining beryllium, 203
 —direct reading, 203
 spectrophotometric, detmn. of hydrazine, 151
 spray nozzles, in scrubber, 463
 spraying, polyurethane, 345
 standards, of illumination, 359
 —for mixtures, 132
 —of noise, 282
 —TLV for 1962, 419
 —for ventilation design, 503
 statistics, environmental monitoring, 75
 —in epidemiology, 433
 stepwedge, in x-ray anal., 216
 stippling, of erythrocytes, 245
 sublimation, micro-vacuum, 222
 —separation method, 222
 sulfur dioxide, sampling for, 296
 systems, ventilation, 503

T

tar, fumes of, 482

TDI

see, toluene diisocyanate
 see, tolylene diisocyanate

terphenyls, toxicity of, 372

testing, of filter samplers, 480
 —mist collector, 396
 —of respirators, 251

tests, of filter efficiency, 473

tetramethyldiaminotriphenylmethane,
 detmn. of manganese, 321

textiles, asbestos mig., 67

thallium, detmn. in urine, 411

thermal precipitator, for dust sampling, 330

thorium-Alizarin, detmn. of fluoride, 314

threshold limits, basis of, 37, 45

Threshold Limit Values, for 1962, 419

tissue, anal. for dust, 58
 —detmn. manganese in, 319

TLV, see also MAC

—basis of, 37, 45
 —for 1962, 419

tolerance, to toxicity, 16

toluene diisocyanate
 see tolylene diisocyanate

tolylene diisocyanate, detmn. of, 228

—exposure to, 265, 345
 —spraying of, 345
 —toxicity of, 447

toxicity, list of, 95

—range data, 95
 —see Hygienic Guides

toxicity,

—of chloracetophenone, 194, 199
 diphenylaminochloroarsine, 194, 199
 nitrogen dioxide, 457
 pelargonic morpholide, 195, 199
 substances, 95
 terphenyls, 372
 toluene diisocyanate, 447

toxicology, threshold limits, 37

—trends in, 8

training, in industrial hygiene, 175

treatment, in occupational medicine, 30

transaminases, 10

trichloroethylene, in blood, 167

—in expired air, 167
 —in exposure of humans, 167
 —in flammable range, 180

tridymite, by x-ray, 214

triphenylmethane, detmn. of thallium, 411

tuberculosis, and silicosis, 379

tubes, indicator, 108, 112, 127

tunnels, health hazards, 273

tumors, from propiolactone, 257

U

- ultraviolet, detmn. of hydrocarbons, 487
- uranium, criticality, 171
- urethanes, see polyurethanes
- urine, determining
 - fluoride in, 157, 314
 - lead in, 424
 - manganese in, 319
 - thallium in, 411

V, W

- velocities, transport, 503
- ventilation, design criteria, 83
 - design of, 503
 - nuclear reactor, 83
 - planning, 83

- visibility, measurement of, 359
 - requirements for, 359
- vision, field of, 251, 364
 - illumination for, 359
 - with respirators, 251

X, Y

- x-ray, detmn. of dusts, 214
- x-ray diffraction, for dust in lungs, 58
- xylene, in sampling phosphorus, 383

Z

- zirconium-Eriochrome, detmn. of fluoride, 314

